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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,081	12/27/2001	Tsuneo Kanda	1232-4807	8482
27123	7590	05/06/2004	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 345 PARK AVENUE NEW YORK, NY 10154			MATHEWS, ALAN A	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Applicati n N .	Applicant(s)	
	10/033,081	KANDA, TSUNEO	
	Examin r	Art Unit	AC
	Alan A. Mathews	2851	

-- The MAILING DATE of this communication appears on th cover sh et with the correspondence address --  
**Period f r Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 36-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-33 and 36-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Perfection of Priority***

1. It is noted that even though Applicant has provided an English translation of the priority document, Applicant has not perfected his claim to priority, since Applicant has not provided a statement that the translation of the certified copy is accurate as required by MPEP 201.15.

### ***Claim Objections***

2. Claims 17-30 are objected to because of the following informalities: In claim 17, line 1, there is no proper antecedent basis for “the mask”. If Applicant recited “a mask” instead of “the mask”, the objection will be withdrawn. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 31 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Boettiger et al. (U. S. Patent No. 6,545,829). Boettiger et al. discloses in column 1, lines 21 and 22, that errors in critical dimensions may be introduced to an exposure filed on a wafer-in-process from reticle errors. Boettiger et al. discloses in figure 4 and column 3, lines 30-48, a projection exposure apparatus for projecting a pattern on mask 110, onto an object 24. A transparent member 116 is formed on the side surface and has a correction part 118 for reducing an error of an image of the pattern projected on the object caused by errors in the pattern.

5. Claims 17 –19, 23, 29, 25, 30, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi (U. S. Patent No. 6,522,386). Nishi discloses in figure 1 a mask stage 8 for installing a mask (reticle) R with a pattern on one surface (see figure 4 and 19 showing the pattern GP on one surface). Figure 1 and column 39, lines 51-67 disclose a transparent correcting plate G1 provided at one side of the substrate. Figure 22 and column 40, lines 6-10, disclose performing an aspheric process on correction plate G1. It is noted that the claims, as written, do not require that the transparent member be part of the mask. Claim 17 states “the mask including a substrate that has a pattern on one surface of the substrate”. The transparent member is just another member of the projection exposure apparatus. The illumination system includes element 1 and the projection optical system includes PL. With respect to claims 18 and 19, column 7, lines 5-25, disclose the use of an ArF laser and use of light with a wavelength 193nm. With respect to claim 36, developing of the wafer occurs in all lithograph systems. Why would anyone expose a wafer and then not develop it?

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 17-33 and 36-39 rejected under 35 U.S.C. 103(a) as being unpatentable over the European Patent Application Publication EP 1 158 361 in view of Nishi (U. S. Patent No. 6,522,386). Figures 2 and 7, and page 16, lines 9-25, in the European Patent Application Publication EP 1 158 361 disclose a mask stage RST for installing a mask (reticle) 1 which comprises a transparent member 3 at a side of a surface of a base 1 with a pattern IP formed on the surface. The illumination optical system is element 12 and the projection optical system is element PL. Figures 12A-12E disclose working the surface of the transmitting plate 3 to correct errors. . Thus, the European Patent Application Publication EP 1 158 361 discloses the invention except for disclosing an aspheric surface on member 3. Nishi discloses in figure 1 a correction plate G1 next to reticle R. Figure 22 and column 40, lines 6-10, disclose performing an aspheric process on correction plate G1. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make an aspheric surface on member 3 in the European Patent Application Publication EP 1 158 361 in view of Nishi for the purpose of producing more accurate results. With respect to claim 18, page 12, paragraph # 66 in the

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European Patent Application Publication EP 1 158 361 discloses using exposure light of 200nm or shorter wavelength. With respect to claim 19, page 16 of the European Patent Application Publication EP 1 158 361, paragraph # 89, discloses use of an F2 laser light source. With respect to claims 20-23, page 16, paragraph # 93, discloses correcting spherical aberrations and using telecentric optical systems. With respect to claim 25, the mechanical process is the grinding and polishing. With respect to claim 26, element 3 is the frame. With respect to claims 27 and 28, page 10, paragraph # 58, discloses making the transparent member 3 out of quartz or fluorite. With respect to claims 32, page 13, paragraph # 71, discloses correction of deflection caused by the plate's own weight, which is the "transformation of the transparent member". Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

### ***Conclusion***

2. Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7. The restriction requirement was made Final in the previous office action.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

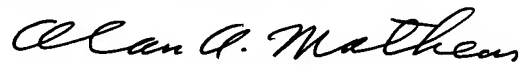
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (571) 272-2112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan A. Mathews  
Primary Examiner  
Art Unit 2851

AAM